

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-16 (Canceled)

17. (Currently Amended) An active matrix display device comprising:

a pixel portion comprising $n \times m$ pixels arranged in matrix;

n signal lines, each of which is electrically connected to corresponding m of the $n \times m$ pixels; and

a driving circuit including:

first to n -th register circuits, each of which is connected to a clock pulse input terminal; and

first to n -th digital data latch circuits, each of which is connected to a digital data input terminal, corresponding one of the first to n -th register circuits, and corresponding one of ~~first to n -th digital data output terminals~~ n signal lines;

wherein:

a k -th circuit of the first to n -th register circuits is connected to a $(k+1)$ -th circuit of the first to n -th register circuits, and a $(k-1)$ -th circuit of the first to n -th digital data latch circuits;

the letters n , m and k denote a natural number; and

the k is smaller than or equal to n .

18. (Previously Presented) An active matrix display device according to claim 17, wherein a transistor included in the driving circuit is a TFT.

19. (Previously Presented) An electric equipment comprising the active matrix display device according to claim 17, selected from the group consisting of a projector, rear projector, front projector, goggle type display, mobile computer, cellular phone notebook personal computer, car navigation, video camera, DVD player, and game machine.

20. (Currently Amended) An active matrix display device comprising:
a pixel portion comprising $n \times m$ pixels arranged in matrix;
 n signal lines, each of which is electrically connected to corresponding m of the $n \times m$ pixels; and
a driving circuit including:
first to n -th register circuits, each of which has ~~having~~:
a clocked inverter circuit connected to a clock pulse input terminal; and
a inverter circuit connected to the clocked inverter circuit;
first to n -th digital data latch circuits, each of which has ~~having~~:
a first transistor connected to a digital data input terminal;
a second transistor connected to the first transistor, and the inverter circuit of
corresponding one of the first to n -th register circuit;
a resetting means;

a digital data holding circuit connected to the second transistor, the resetting means, and corresponding one of ~~first to n-th digital data output terminals~~ n signal lines;

wherein:

the inverter circuit of k-th register circuit is connected to the clocked inverter circuit of (k+1)-th register circuit, and the first transistor of (k-1)-th digital data latch circuit;

the letters n, m and k denote a natural number; and

the k is smaller than or equal to n.

21. (Previously Presented) An active matrix display device according to claim 20, wherein a transistor included in the driving circuit is a TFT.

22. (Previously Presented) An active matrix display device according to claim 20, wherein the digital data holding circuit has two inverter circuits.

23. (Previously Presented) An active matrix display device according to claim 20, wherein the digital data holding circuit has a capacitance.

24. (Previously Presented) An active matrix display device according to claim 20, wherein:

the resetting means has a third transistor connected to a reset signal input terminal; and

polarity of the third transistor is reversal from that of the first and second transistors.

25. (Previously Presented) An active matrix display device according to claim 20, wherein the resetting means has a resistance.

26. (Previously Presented) An electric equipment comprising the active matrix display device according to claim 20, selected from the group consisting of a projector, rear projector, front projector, goggle type display, mobile computer, cellular phone notebook personal computer, car navigation, video camera, DVD player, and game machine.

27. (Currently Amended) An active matrix display device comprising:
a pixel portion comprising $n \times m$ pixels arranged in matrix;
 n signal lines, each of which is electrically connected to corresponding m of the $n \times m$ pixels; and

a driving circuit including:
first to n -th register circuits, each of which is connected to a clock pulse input terminal;

first to n -th switching circuits, each of which is connected to L/R direction selecting signal input terminal, and corresponding one of the first to n -th resistor circuits;
and

first to n-th digital data latch circuits, each of which is connected a digital data input terminal, corresponding one of the first to n-th switching circuits, and corresponding one of ~~first to n-th digital data output terminals~~ n signal lines;

wherein:

a k-th circuit of the first to n-th switching circuits is connected to a (k+2)-th circuit of the first to n-th switching circuits, a (k+1)-th circuit of the first to n-th register circuits, and a (k-1)-th circuit of the first to n-th digital data latch circuits;

the letters n, m and k denote a natural number; and

the k is smaller than or equal to n.

28. (Previously Presented) An active matrix display device according to claim 27, wherein a transistor included in the driving circuit is a TFT.

29. (Previously Presented) An electric equipment comprising the active matrix display device according to claim 27, selected from the group consisting of a projector, rear projector, front projector, goggle type display, mobile computer, cellular phone notebook personal computer, car navigation, video camera, DVD player, and game machine.

30. (Currently Amended) An active matrix display device comprising:

a pixel portion comprising n x m pixels arranged in matrix;

n signal lines, each of which is electrically connected to corresponding m of the n x m pixels; and

a driving circuit including:

first to n-th register circuits, each of which has having:

a clocked inverter circuit connected to a clock pulse input terminal; and

a inverter circuit connected to the clocked inverter circuit;

first to n-th switching circuits, each of which is connected to L/R direction selecting signal input terminal, and the inverter circuit of corresponding one of the first to n-th resister circuits;

first to n-th digital data latch circuits, each of which has having:

a first transistor connected to a digital data input terminal;

a second transistor connected to the first transistor, and corresponding one of the first to n-th switching circuit;

a resetting means;

a digital data holding circuit connected to the second transistor, to the resetting means, and corresponding one of ~~first to n-th digital data output terminals~~ n signal lines;

wherein:

a k-th circuit of the first to n-th switching circuit is connected to a (k+2)-th circuit of the first to n-th switching circuits, the clocked inverter circuit of (k+1)-th register circuit, and the first transistor of (k-1)-th digital data latch circuit;

the letters n, m and k denote a natural number; and

the k is smaller than or equal to n.

31. (Previously Presented) An active matrix display device according to claim 30, wherein the digital data holding circuit has two inverter circuits.

32. (Previously Presented) An active matrix display device according to claim 30, wherein the digital data holding circuit has a capacitance.

33. (Previously Presented) An active matrix display device according to claim 30, wherein:

the resetting means has a third transistor connected to a reset signal input terminal; and

polarity of the third transistor is reversal from that of the first and second transistors.

34. (Previously Presented) An active matrix display device according to claim 30, wherein the resetting means has a resistance.

35. (Previously Presented) An electric equipment comprising the active matrix display device according to claim 30, selected from the group consisting of a projector, rear projector, front projector, goggle type display, mobile computer, cellular phone notebook personal computer, car navigation, video camera, DVD player, and game machine.

36. (Currently Amended) An active matrix display device comprising:

a substrate;

a pixel portion comprising $n \times m$ pixels over the substrate, arranged in matrix;

n signal lines, each of which is electrically connected to corresponding m of the n
x m pixels; and

a driving circuit over the substrate, including:

first to n-th register circuits, each of which is connected to a clock pulse input terminal; and

first to n-th digital data latch circuits, each of which is connected to a digital data input terminal, corresponding one of the first to n-th register circuits, and corresponding one of ~~first to n-th digital data output terminals~~ n signal lines;

wherein:

a k-th circuit of the first to n-th register circuits is connected to a (k+1)-th circuit of the first to n-th register circuits, and a (k-1)-th circuit of the first to n-th digital data latch circuits;

the letters n, m and k denote a natural number; and

the k is smaller than or equal to n.

37. (Previously Presented) An active matrix display device according to claim 36, wherein a transistor included in the driving circuit is a TFT.

38. (Previously Presented) An electric equipment comprising the active matrix display device according to claim 36, selected from the group consisting of a projector, rear projector, front projector, goggle type display, mobile computer, cellular phone notebook personal computer, car navigation, video camera, DVD player, and game machine.

39. (Currently Amended) An active matrix display device comprising:

- a substrate;
- a pixel portion comprising $n \times m$ pixels over the substrate, arranged in matrix;
- n signal lines, each of which is electrically connected to corresponding m of the $n \times m$ pixels; and
- a driving circuit over the substrate, including:
 - first to n -th register circuits, each of which is connected to a clock pulse input terminal;
 - first to n -th switching circuits, each of which is connected to L/R direction selecting signal input terminal, and corresponding one of the first to n -th register circuits; and
 - first to n -th digital data latch circuits, each of which is connected a digital data input terminal, corresponding one of the first to n -th switching circuits, and corresponding one of ~~first to n -th digital data output terminals~~ n signal lines;

wherein:

- a k -th circuit of the first to n -th switching circuits is connected to a $(k+2)$ -th circuit of the first to n -th switching circuits, a $(k+1)$ -th circuit of the first to n -th register circuits, and a $(k-1)$ -th circuit of the first to n -th digital data latch circuits;
- the letters n , m and k denote a natural number; and
- the k is smaller than or equal to n .

40. (Previously Presented) An active matrix display device according to claim 39, wherein a transistor included in the driving circuit is a TFT.

41. (Canceled)

42. (Previously Presented) An electric equipment comprising the active matrix display device according to claim 39, selected from the group consisting of a projector, rear projector, front projector, goggle type display, mobile computer, cellular phone notebook personal computer, car navigation, video camera, DVD player, and game machine.

43. (Currently Amended) An active matrix display device comprising:
a substrate;
a pixel portion comprising $n \times m$ pixels over the substrate, arranged in matrix;
 n signal lines, each of which is electrically connected to corresponding m of the $n \times m$ pixels; and

a driving circuit over the substrate, including:
first to n -th register circuits, each of which has ~~having~~:
a clocked inverter circuit connected to a clock pulse input terminal; and
an inverter circuit connected to the clocked inverter circuit;
first to n -th switching circuits, each of which is connected to L/R direction selecting signal input terminal, and the inverter circuit of corresponding one of the first to n -th resistor circuits;

first to n -th digital data latch circuits, each of which has ~~having~~:
a first transistor connected to a digital data input terminal;

a second transistor connected to the first transistor, and corresponding one of the first to n-th switching circuit;

a resetting means;

a digital data holding circuit connected to the second transistor, to the resetting means, and corresponding one of ~~first to n-th digital data output terminals~~ n signal lines;

wherein:

a k-th circuit of the first to n-th switching circuit is connected to a (k+2)-th circuit of the first to n-th switching circuits, the clocked inverter circuit of (k+1)-th register circuit, and the first transistor of (k-1)-th digital data latch circuit;

the letters n, m and k denote a natural number; and

the k is smaller than or equal to n.

44. (Previously Presented) An active matrix display device according to claim 43, wherein a transistor included in the driving circuit is a TFT.

45. (Previously Presented) An active matrix display device according to claim 43, wherein the digital data holding circuit has two inverter circuits.

46. (Previously Presented) An active matrix display device according to claim 43, wherein the digital data holding circuit has a capacitance.

47. (Previously Presented) An active matrix display device according to claim 43, wherein:

the resetting means has a third transistor connected to a reset signal input terminal; and

polarity of the third transistor is reversal from that of the first and second transistors.

48. (Previously Presented) An active matrix display device according to claim 43, wherein the resetting means has a resistance.

49. (Previously Presented) An electric equipment comprising the active matrix display device according to claim 43, selected from the group consisting of a projector, rear projector, front projector, goggle type display, mobile computer, cellular phone notebook personal computer, car navigation, video camera, DVD player, and game machine.